SPECIAL NOTICES

ERRORS IN JUNE ISSUE

Front cover photograph was taken by Larry Mellichamp.

Page 57, line 7 under caption should read "probably the most *atypical* of all the *Sarracenia* species."

The World Carnivorous Plant List, published as a supplement to Volume 3 of CPN, is still available. To order a copy, send \$1.00 U.S. to Pat Hansen, CPN, The Fullerton Arboretum, Dept. of Biology, California State University, Fullerton, CA 92634.

Short Notes

SUMMARY NOTE A CRITICAL REVIEW OF PUBLISHED VARIANTS OF SARRACENIA PURPUREA L.

by D. E. Schnell (Rt. 4, Box 275B, Statesville, NC 28677)

My paper with the above title will be appearing in CASTANEA late in 1979. In the meantime, I felt that CPN readers might benefit by listing the published variants of *S. purpurea* along with author citations and the paper's bibliography. In my personal correspondence as well as in various comments in CPN, I have noted some confusion concerning the status, sources of original information, and indeed even spelling of these variants.

Since the original paper is quite lengthy, it cannot be duplicated here. Instead, I will give the barest summary consisting of variant name, bibliographic citation, a very brief description of key features of the variant, occasional comments, and some indication of my opinion of its status. The latter will be indicated by an asterisk (*) after the name if I have concluded that the variant is acceptably genetic, and no marking if I do not accept it at this time. Occasionally,

there will be a question mark in parentheses (?) indicating that there is strong argument for accepting the variant but that some additional work is required. Since there is not space for detailing my arguments and reasoning, readers are referred to my full paper when it appears later. In the meantime, they may wish to consult papers listed in the bibliography at the end of this note.

ssp. purpurea*

ssp. venosa* (Wherry, 1933, 1972, 1973; Bell, 1949; McDaniel, 1966, 1971) The more northern ssp. purpurea is characterized by longer narrower pitchers of greater than 3:1 length/width ratio, usually glabrous (rarely sparingly hirsute), smaller hood wings. The southern ssp. venosa has shorter, wider pitchers of less than 3:1 length/width ratio, is externally covered by bristly hairs (rarely glabrous), and the hood wings are much wider. In

addition, I note floral differences (Schnell, 1978, 1979).

"Horticultural variety Louis Burk" (?) (Wherry, 1933). Occurs in southern Alabama and western Florida and is more easily found than previously suggested, in fact seeming predominant in most locations. This is the famous plant with a white to nearly white style disc, pink petals (often nearly white themselves) and green sepals.

f. heterophylla* (Eaton in 1822, and Torrey in 1839, both quoted in Wherry, 1933. See also Fernald, 1922; Bell, 1949; Case, 1956; McDaniel, 1966, 1971; Korolas, 1977; Griesbach, 1977). This form of ssp. purpurea found in widely scattered areas of the northern range is mainly characterized by complete absence of red pigment in any growth stage. Flower petals are yellow, all other parts yellowgreen. To qualify as f. heterophylla, plants must show no red pigment when growing in full light.

f. *incisa* (Rousseau, 1957). Quebec on a dolomitic island. Flowers have very deeply incised style discs, the lobes usually numbering five, but occasionally varying from two to more than five, some with secondary lobes.

f. plena (Klawe, 1955). A single plant found in Nova Scotia with a rosulate flower having no stamens or pistil.

var. stolonifera (Macfarlane and Steckbeck, 1933). In New Jersey pine barrens ponds where it grows in floating sphagnum mats with roots reaching into underlying muddy silt. Characterized by extremely clonal habit with greatly branching rhizomes having large numbers of growth points spread over a very large surface area. In addition, leaves and especially petioles seem longer.

var. ripicola (Boivin, 1951. Also, indi-

rectly, see Mandossian, 1966). These plants of ssp. purpurea grow in sandyclay or marl soils rather than sphagnum and are found most often on lake and river shores. Due to nature of soil medium vs. sphagnum, all aerial plant parts have greater sun exposure. This group is characterized by short, brittle, red pitchers, there being many more pitchers per growth point than on plants growing in sphagnum. In addition, the rhizome is shorter and more vertical. Most often in northern Great Lakes region.

var. terrae-novae (See Wherry, 1933, for earlier references to this epithet; Boivin, 1951 for implied current usage). This subgroup of ssp. purpurea apparently is to include all plants that are not var. ripicola (v.s.); that is, those with larger, fewer pitchers per growth point and growing in sphagnum. There is much historical confusion and inaccuracy concerning this designation, and a possible misprint in Boivin's paper.

LITERATURE CITED

BELL, C. R. 1949. A cytotaxonomic study of the Sarraceniaceae of North America. J. Elisha Mitchell Sci. Soc. 65: 137-166, Pl. 8-14.

BOIVIN, B. 1951. Centurie de plantes Canadiennes-II. Canad. Field Naturalist 65:21.

CASE, F. W. JR. 1956. Some Michigan records for *Sarracenia purpurea* forma *heterophylla*. Rhodora 58:203-207.

FERNALD, M. L. 1922. Notes on the flora of western Nova Scotia. Rhodora 4:165-183.

GRIESBACH, R. 1977. Minnesota site for *Sarrancenia purpurea* f. *heterophylla* (News and Views item). Carnivorous Plant Newsletter 6:47.

KLAWE, W. L. 1955. Additions to the flora of Yarmouth County, Nova Scotia, Canad. Field Naturalist 69:129.

KOROLAS, J. 1977. Ontario site for Sarracenia purpurea f. heterophylla (News

- and Views item). Carnivorous Plant Newsletter 6:33.
- LINDQUIST, J. A. 1975. Bacteriological and ecological observations on the northern pitcher plant, *Sarracenia purpurea* L. Masters Thesis, University of Wisconsin, Madison. x + 215 pp.
- MACFARLANE, J. M. AND D. W. STECKBECK. 1933. Sarracenia purpurea var. stolonifera. A noteworthy morphological and ecological type. Bull. Royal Botanic Gardens, Kew (4) 161-169.
- MANDOSSIAN, A. J. 1966. Variations in the leaf of *Sarracenia purpurea* (pitcher plant). Mich. Botanist 5:26-35.
- MCDANIEL, S. 1966. A taxonomic revision of *Sarracenia* (Sarraceniaceae). Ph.D. dissertation, Florida State University (University Microfilms, Ann Arbor, MI 48106, No. 67-345).

- MCDANIEL, S. 1971. The genus Sarracenia (Sarraceniaceae). Bull. Tall Timbers Research Station, Tallahassee, FL, No. 9.
- ROUSSEAU, J. 1957. Nouvelles entites botaniques de l'enclave dolomitique du Lac Mistassini, Province de Quebec. Bull. Du. Jard. Bot. 27:378.
- SCHNELL, D. E. 1978. *Sarracenia* L. petal extract chromatography. Castanea 43: 107-115.
- of Sarracenia L. Castanea: In Press.
- WHERRY, E. T. 1933. The geographic relations of *Sarracenia purpurea*. Bartonia (15):1-6.
- species. Castanea 37:146-147.
- orous plants. Carnivorous Plant Newsletter 2:35-37.

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ENVIRONMENTAL CHAMBER

by Brett Martison (2010 Surfside, Lincoln, NE 68528)

I have developed an inexpensive Carnivorous Plant growing chamber with which I can control humidity and temperature. I believe this will help a lot of CP growers that live in climates such as mine in Nebraska.

Information: Tap water may be used because of distillation. Venting controls humidity: This is done by placing pieces of glass between racks. Temperature is controlled by aquarium heater. Water and air temperature do not vary 5°F. It ranges from house temperature to approximately 100°F. It holds well at 90°F. Two removable glass racks for easy cleaning. Removable glass section for easy access.

Suggestions: Cheapest way to accomplish same is to convert old aquarium by gluing two pieces of glass in the center lengthwise and using aquarium heater in normal. This chamber is for general use, less expensive models could easily be designed using this same method for individual species, such as sundews. Lighting: I suggest natural light, southern exposure helps kill fungus. This chamber also has a cooling effect; the direct sunlight causes natural evaporation within the chamber as a normal terrarium does not. If using direct sunlight be sure to fill the glass trays with about 1/2 inch of distilled water when more humidity is desired or if you wish to water the plants from the bottom. This amount of water will evaporate from the tray in approximately two days at 90°. Allow tray to be dry one to two days and repeat. Darlingtonia does not seem to like a general chamber, but